

Information for patients and carers

Radiotherapy for Brain Cancer



Details of your treatment

This leaflet is designed for people who are receiving radiotherapy to the brain. If you have recently been diagnosed with brain cancer, it is normal to experience a wide range of emotions.

Your partner, family or friends might also find this leaflet useful to understand what you are currently experiencing so that they can help to support you.

The information in this booklet should not be seen as a replacement for talking with the radiographers, specialist nurses and doctors involved in your treatment and care.

What is radiotherapy?

Radiotherapy is a specialised treatment that uses precise, carefully measured doses of radiation to treat cancer.

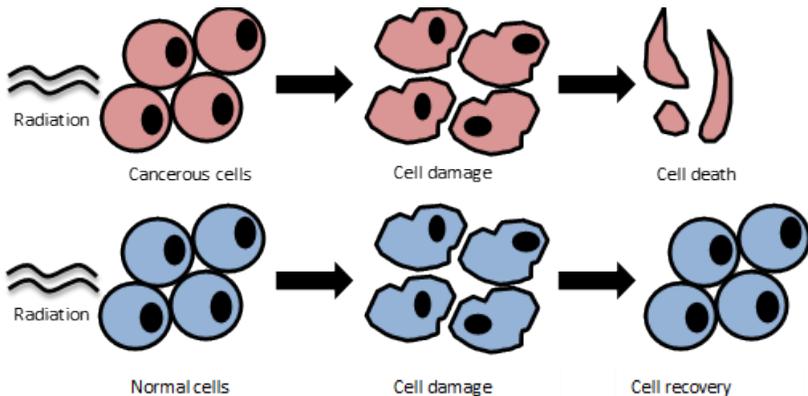
Treatment is given by highly trained radiographers, using specialised machines known as linear accelerators. The radiographers and planning staff work closely with your consultant to plan and deliver your treatment.

How does radiotherapy work?

Radiotherapy uses high energy x-rays to treat cancer. The X-ray beams are directed at the treatment area and cause damage to cells in the treatment area.

Normal healthy cells can recover from this damage, however abnormal cancer cells cannot.

Radiotherapy is therefore given to kill the cancer cells in the targeted area and reduce the chances of your cancer recurring or delay its progression. The treatment itself is painless.



Will I be radioactive?

If you are having external beam radiotherapy you **will not be radioactive**. It is safe to be in close contact with people, including pregnant people, babies and children.

When will my radiotherapy start?

After your consultant or specialist nurse has discussed your treatment options with you, and you have consented to go ahead with treatment you will receive an appointment to attend your radiotherapy planning scan appointment.

You will be given your first radiotherapy treatment appointment when you attend for your planning scan.

The planning scan appointment is used to plan your radiotherapy treatment. This can take anywhere from a few days up to 3 weeks. Please do not be alarmed if you feel there is a long time between these appointments, this is due to the complex nature of the planning process.

If you require certain times and/or hospital transport, please let a member of staff know before you start treatment. The radiotherapy appointment team will do their best to accommodate your request, however this cannot always be guaranteed.

Chemotherapy

Some patients will have chemotherapy alongside radiotherapy. You will attend a pre-chemo assessment before starting radiotherapy where relevant information and advice will be given to you.

Before your treatment

Pretreatment

At the planning appointment you will have a CT scan of your head. The treatment planning team use this scan to accurately plan your radiotherapy treatment, whilst ensuring that surrounding areas close to the treatment area do not receive more radiation than necessary.

During the scan

You will need to have a mask made for the planning scan, which will be used each day for your treatment. The mask is made from a specialised thermoplastic material which turns soft when heated in a water bath.

The radiographers will drape this over your face and mould it to the contours of your face while it cools and hardens.

The mask is designed to ensure your head remains perfectly still, which is important to guarantee accuracy for treatment. The radiographers will take the CT scan whilst you are in the mask. There is nothing to see or feel during the scan.

Radiotherapy Treatment

Before your first radiotherapy session, a radiographer will discuss the treatment process and answer any questions you may have, as well as giving you your full list of appointments.

It is very important that you do not miss any of your radiotherapy treatments, as it can make the treatment less effective. If you are feeling too ill to attend your treatment, please call the department and speak to a member of the team to see if we can assist.

For your radiotherapy treatment you will lie down in the same position as when you came for the planning scan. The radiographers will start by putting the mask on. The radiographers will then begin to position you for treatment.

Once the checks have been completed, the radiographers leave the room to start the treatment. Only the patient can be in the treatment room when the machine is delivering treatment, but staff will monitor you via CCTV.

The radiographers will firstly complete a CT scan, to verify your position and you may feel the treatment couch move as they make minor adjustments. Once you are in the correct position your treatment will begin. The treatment will only take several minutes; and there is nothing to see or feel during treatment. The whole treatment process takes approximately 15 minutes.

Treatment reviews

Whilst you are having your radiotherapy treatments, you will have scheduled review clinic appointments with your consultant, specialist nurse or the radiotherapy review team within the radiotherapy department. These review clinic appointments are for you to discuss any concerns or side effects that you may be experiencing from treatment.

The review clinics are scheduled on specific times and days; and will be on your treatment appointment list.

Blood tests

You may be required to have weekly blood tests for this treatment. Your appointment list will have a reminder on what day you are to have your blood test.

The blood clinic is open 8:00am - 5:00pm and is located at the main entrance of the hospital.

You may also be required to have daily or weekly monitoring of your blood glucose levels. This is done in the radiotherapy department, and radiographers will explain when this is necessary.

Staff you will meet

We are a mixed gender department, and treatment will be given by male and female staff members.

Royal Preston Hospital is a teaching hospital which means that we train and support undergraduate and postgraduate radiotherapy students and medical students. Students take an active part in treatments and are closely monitored by qualified staff.

Side effects

Most people will experience side effects of radiotherapy, although the severity will vary from person to person. Side effects do not usually happen straight away but start to develop around a week into your treatment, and they will continue after treatment finishes.

You will be given advice by your consultant/consultant radiographer and treatment radiographers on how to manage any side effects.

If you are having other treatments, e.g. chemotherapy you may experience side effects alongside radiotherapy, if you are suffering with chemotherapy related side effects, you can contact the **oncology helpline on 01772 523205**

Short Term side effects

Short term side effects start during or shortly after radiotherapy and usually resolve within two to six months. These side effects vary in frequency and will be explained in more detail during the consent process.

- Tiredness
- Nausea
- Increased seizure risk
- Hair loss
- Skin reaction
- Neurological changes

Late side effects

The late or long-term effects of radiotherapy can occur several months and years after the radiotherapy has finished. This is dependent on your treatment site and will be monitored and managed at your routine follow-up appointments. Long term side effects also vary in frequency, and this will also be explained during the consent process.

- Neurocognitive decline
- Cataract
- Pituitary dysfunction
- Increased risk of stroke

Smoking

Smoking can make your radiotherapy side effects worse and reduce the effectiveness of the treatment. It is important that you reduce or stop smoking whilst on treatment.

We understand that this may be difficult, information for stop smoking services can be found at the end of the leaflet

After your treatment

You will receive an appointment through the post to see your consultant or consultant radiographer around six to eight weeks after completion of your radiotherapy.

It is important to be aware that any side effects experienced during treatment are likely to get worse before they get better. Short term side effects reach their peak approximately two weeks after finishing treatment. These should have significantly improved within 8 weeks. Some people take a little longer than this to recover.

There is a Macmillan team available every weekday in the Rosemere building at Royal Preston Hospital, ask any members of staff to point you in the right direction. You can find their contact details at the end of this leaflet

Contact details

Should you require further advice or information please contact:

Radiotherapy Reception (01772) 522923

Appointments (01772) 522931

Transport (01772) 522295

If you would like to watch a short information video about radiotherapy, please scan the QR code below.



Sources of further information

www.lancsteachinghospitals.nhs.uk

www.nhs.uk

www.accessable.co.uk

Stop smoking services

<https://www.nhs.uk/better-health/quit-smoking/find-your-local-stop-smoking-service/>

Alcohol advice

<https://alcoholchange.org.uk/>

Macmillan at Rosemere Cancer Centre

<https://tinyurl.com/38z3d2fy>

All our patient information leaflets are available on our website for patients to access and download:

www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

Lancashire Teaching Hospitals NHS Foundation Trust is not responsible for the content of external internet sites.

Lancashire Teaching Hospitals is a smoke-free site. Smoking is not permitted anywhere on any of our premises, either inside or outside the buildings. Our staff will ask you about your smoking status when you come to hospital and will offer you support and advice about stopping smoking this will include Nicotine Replacement Therapy to help manage your symptoms of withdrawal and the opportunity to speak to a nurse or advisor from the specialist Tobacco and Alcohol Care Team.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

Department: Radiotherapy
Division: Surgery
Production date: June 2025
Review date: June 2028
Document Code: CA227 V2